

AMENDMENTS TO THE CLAIMS

Upon entry of the present amendment, the status of the claims will be as is shown below. This listing of claims replaces all previous versions and listings of claims in the present application.

Listing of Claims:

1. (Currently Amended) A method of recording data to a free area of a recording area of an information recording medium, the information recording medium having the recording area for storing data which is managed by a file system, wherein

the recording area of the information recording medium is managed in units of blocks, and each ~~block~~ of the blocks includes at least two clusters as units for storing data for the file system,

the method of recording data comprises:

searching the blocks for a valid block, the valid block having at least a predetermined threshold number of unused clusters;

determining the valid block from the searched blocks;

writing the data in the determined valid block prior to writing the data in the searched blocks having less than the predetermined threshold number of unused clusters; and

acquiring information about the predetermined threshold number of unused clusters from the information recording medium, the information acquired from the information recording medium indicating information for determining the

P30050.A10

predetermined threshold number of unused clusters necessary to write the data at least at a predetermined minimum speed, the information being acquired from the information recording medium before searching the blocks for the valid block and before writing the data in the determined valid block, and

the information includes at least one of a class of the information recording medium, a number of clusters of each of the searched blocks, a number of used clusters of each of the searched blocks, and a size of each of the searched blocks.

2. (Previously Presented) The recording method according to claim 1, wherein the data are written in unused clusters in the valid block.

3. (Previously Presented) The recording method according to claim 2, further comprising:

counting the unused clusters contained in each block in the recording area;

determining the valid block on the basis of the counting result;

generating and holding a valid free area list which is list information related to the valid block; and

searching for the valid block by referring to the valid free area list at data recording process.

4. (Cancelled)

5. (Currently Amended) The recording method according to claim 1, wherein the predetermined threshold number of unused clusters is a value of at least one-

half of the number of clusters included in each block.

6. (Currently Amended) A data processing apparatus for writing or reading data to or from an information recording medium, wherein

a recording area of the information recording medium is managed in units of blocks, each ~~block~~ of the blocks includes at least two clusters, and the clusters are units for storing data for a file system,

the data processing apparatus comprises:

an I/O processor that processes input and output of information for the information recording medium;

a file system controller that manages data stored in the information recording medium, as a file;

a data processor that controls writing and reading of data to and from the information recording medium; and

a valid free area manager that manages, by units of blocks, information for the blocks containing at least a predetermined threshold number of unused clusters in an area of the information recording medium,

when necessary to record data to a new free area, the data processor, as a control, searches for a valid block from the managed blocks with reference to the information held in the valid free area manager, and writes data to the searched valid block prior to writing data to another one of the managed blocks, [[and]]

information about the predetermined threshold number of unused clusters is acquired from the information recording medium, the information acquired from the information recording medium indicates information for determining the predetermined

threshold number of unused clusters necessary for writing the data at least at a predetermined minimum speed, the information being acquired from the information recording medium before the data processor searches for the valid block and writes the data to the searched valid block, and

the information includes at least one of a class of the information recording medium, a number of clusters of each of the searched blocks, a number of used clusters of each of the searched blocks, and a size of each of the searched blocks.

7. (Previously Presented) The data processing apparatus of claim 6, wherein the valid free area manager holds a valid free area list which is list information related to the valid block which is one of the blocks including at least the predetermined threshold number of unused clusters.

8. (Cancelled)

9. (Currently Amended) The data processing apparatus of claim 6, wherein the predetermined threshold number of unused clusters is a value of at least one-half of the number of clusters included in each block.

10-13. (Cancelled)

14. (Previously Presented) The recording method according to claim 1, wherein the predetermined minimum speed is a speed necessary for real-time recording of the data.

15. (Previously Presented) The data processing apparatus of claim 6, wherein the predetermined minimum speed is a speed necessary for real-time recording of the data.

16. (New) The recording method according to claim 1, wherein the information includes a class of the information recording medium.

17. (New) The recording method according to claim 1, wherein the information includes a number of clusters of each of the searched blocks.

18. (New) The recording method according to claim 1, wherein the information includes a number of used clusters of each of the searched blocks.

19. (New) The recording method according to claim 1, wherein the information includes a size of each of the searched blocks.

20. (New) The data recording method according to claim 1, further comprising:

writing the data in one of the searched blocks having less than the predetermined threshold number of unused clusters when none of the searched blocks are determined to be the valid block

21. (New) The data processing apparatus of claim 6, wherein the information includes a class of the information recording medium.

22. (New) The data processing apparatus of claim 6, wherein the information includes a number of clusters of each of the searched blocks.

23. (New) The data processing apparatus of claim 6, wherein the information includes a number of used clusters of each of the searched blocks.

24. (New) The data processing apparatus of claim 6, wherein the information includes a size of each of the searched blocks

25. (New) The data processing apparatus of claim 6, wherein the data processor writes the data to one of the searched blocks having less than the predetermined threshold number of unused clusters when none of the searched blocks is the valid block.